

# RIDOT TMC Incident Statistics 10/1/2009 To 12/31/2009

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is done quarterly. By making these statistics available to you, we hope that you can learn more about the program and understand the benefit of the services we provide to the Rhode Island motoring public.

The types of incidents tabulated in this report include disabled vehicles, debris on the roadway, emergency roadwork, vehicle accidents, and vehicle rollovers. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (http://www.tmc.state.ri.us), including construction and incident information.

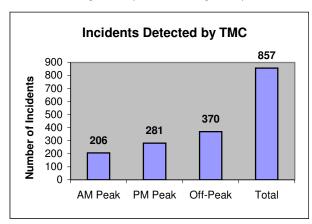
# **RIDOT TMC Incident Statistics Report**

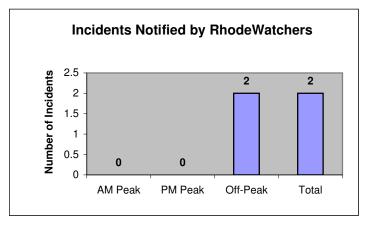
#### 1. Peak Period Incident Statistics\*

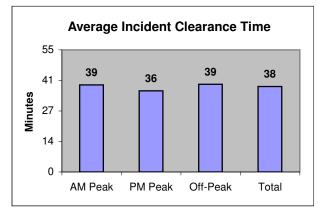
	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	219	285	384	888
Avg. Incident Duration (hr:min)	40	37	40	39
Avg. Incident Clearance Time (hr:min)	39	36	39	38
Avg. Incident Recovery Time (hr:min)	0	1	0	1
# Detected by TMC Operators (CCVE)	74	155	145	374
# Detected by TMC, State Police	132	126	225	483
# Notified by RhodeWatchers	0	0	2	2
# of Messages Posted VMS	16	26	46	88
# of Messages Posted DMS	81	103	155	339
# of Messages Posted HAR	49	72	98	219
# of Messages posted Web	194	275	329	798
Avg. Delay Cost**	\$167,500	\$157,267	\$168,858	\$164,803
Total Delay Cost	\$36,682,541	\$44,821,056	\$64,841,638	\$146,345,235

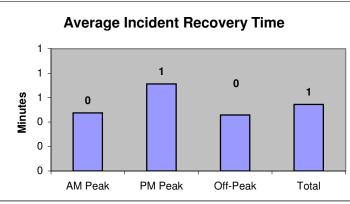
<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

<sup>\*\*</sup> Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.









Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

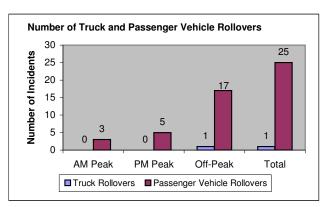
**Incident Clearance Time** is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

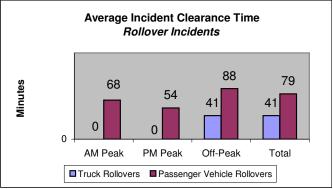
**Incident Recovery Time** is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.

#### 2. Rollover Incident Statistics\*

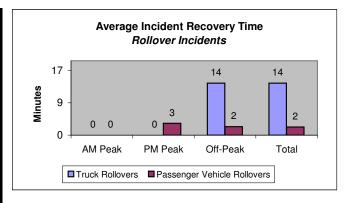
	Trucks			Automobiles				
			Off-		AM	PM	Off-	
VEHICLES	AM Peak	PM Peak	Peak	Total	Peak	Peak	Peak	Total
No. of Rollovers	0	0	1	1	3	5	17	25
Avg. Incident Duration								
(min)	0	0	55	55	68	58	90	81
Avg. Incident Clearance								
Time (min)	0	0	41	41	68	54	88	79
Avg. Incident Recovery								
Time (min)	0	0	14	14	0	3	2	2

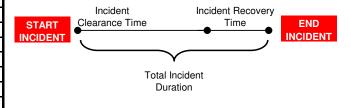
<sup>\*</sup> AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday





1		
Roadway	Exit Number	Number Of Rollovers
Airport Connector Westbour	N/A	1
Interstate 295 Northbound	10	1
Interstate 295 Northbound	8A	1
Interstate 295 Southbound	6	1
Interstate 295 Southbound	7 <b>A</b>	1
Interstate 295 Southbound	11	1
Interstate 295 Southbound	9A	1
Interstate 95 Northbound	8A	1
Interstate 95 Northbound	29	1
Interstate 95 Northbound	18	1
Interstate 95 Northbound	29	1
Interstate 95 Northbound	24	1
Interstate 95 Northbound	22A	1
Interstate 95 Northbound	5B	1
Interstate 95 Southbound	5B	1
Interstate 95 Southbound	16	1
Interstate 95 Southbound	6A	1
Interstate 95 Southbound	6A	1
Route 146 Northbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Southbound	N/A	1
Route 146 Southbound	N/A	1
Route 4 Northbound	8	1
Route 6 Westbound	N/A	1
	TOTAL	26





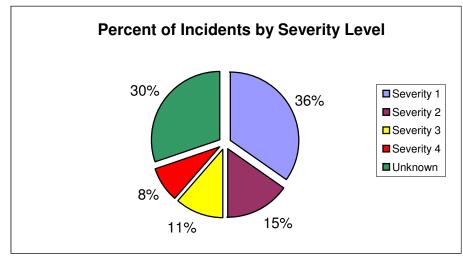
## 3. Incidents by Severity Level

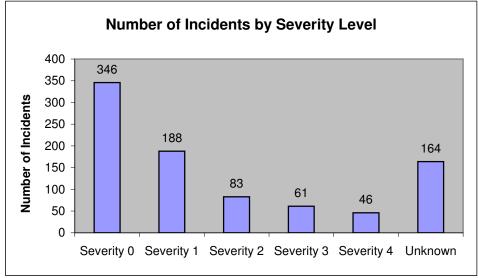
Severity Level*	No. of Incidents
Severity 0	346
Severity 1	188
Severity 2	83
Severity 3	61
Severity 4	46
Unknown	164
Total	888

Number of Incidents with a Secondary Incident: 1

Percentage of Incidents with a Secondary Incident: 0.11%

Note: A "secondary" incident is one that is the result of an earlier incident.





## \*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR hazardous materials (HAZMAT) w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

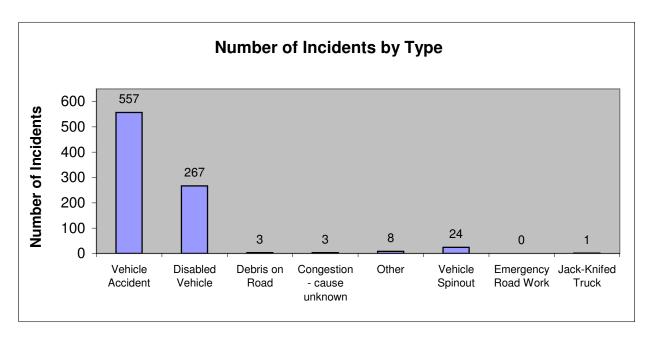
Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

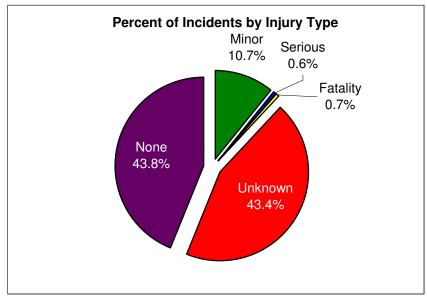
# 4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	557
Disabled Vehicle	267
Debris on Road	3
Congestion - cause unknown	3
Other	8
Vehicle Spinout	24
Emergency Road Work	0
Jack-Knifed Truck	1
Total Number of Incidents	863

# 5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	95
Serious	5
Fatality	6
Unknown	393
None	389
Total	888





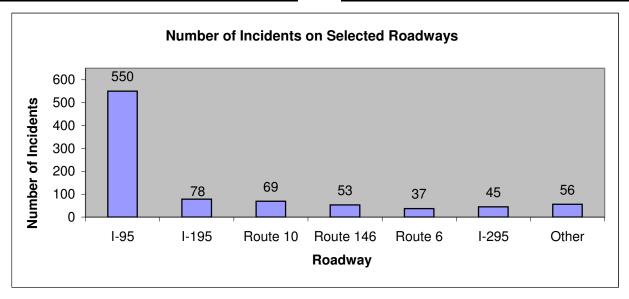
# 6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	588
Wet	259
Icy	7
Snow-Covered	34
Flooded	0
Other	0
Total	888
Precipitation	
None	674
Light-moderate rain falling	160
Heavy rain falling	25
Light-moderate sleet falling	1
Heavy sleet falling	0
Light-moderate snow falling	9
Heavy snow falling	19
Total	888
Wind	
Calm to Moderate	838
Moderate to Strong	45
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	0
N/A	5
Total	888
Visibility	
Clear	694
Light fog	12
Dense fog	1
Reduced- rain	148
Reduced-snow	13
Poor-heavy rain/sleet	2
Poor-heavy snow	17
Reduced-smoke	0
Other	0
N/A	1
Total	888

# 7. Incidents Detected by Primary Notifier on Selected Roadways

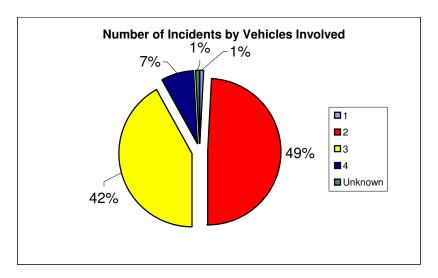
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	37
	State Police Scanner	36
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	4
	Total	<i>78</i>
I-95	TMC Operator	269
	State Police Scanner	226
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	55
	Total	550
I-295	TMC Operator	5
	State Police Scanner	27
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	13
	Total	45

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	28
	State Police Scanner	28
	Local Fire Department	1
	Rhode Watcher	2
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	10
	Total	69
Route 146	TMC Operator	14
	State Police Scanner	30
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	9
	Total	53
Route 6	TMC Operator	13
	State Police Scanner	15
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	8
	Total	37



# 8. Incidents by Number of Vehicles Involved

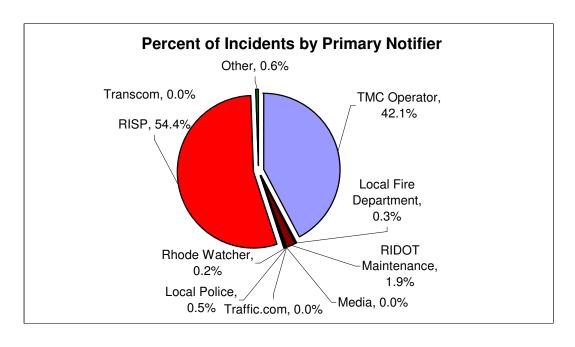
No. of Vehicles Involved	No. of Incidents
1	6
2	422
3	361
4	61
5	28
6	2
7	0
8	0
9	1
10+	0
Unknown	7
Total Incidents	888

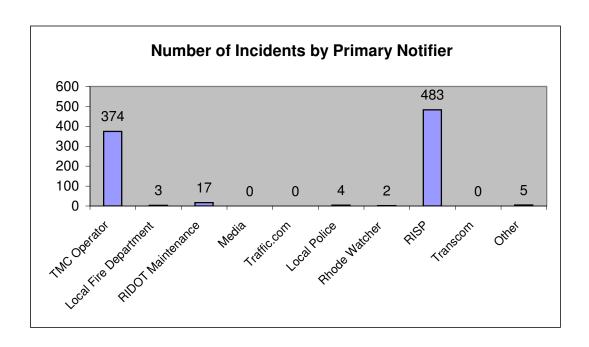


## 9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	374
Local Fire Department	3
RIDOT Maintenance	17
Media	0
Traffic.com	0
Local Police	4
Rhode Watcher	2
RISP	483
Transcom	0
Other	5
Total	888

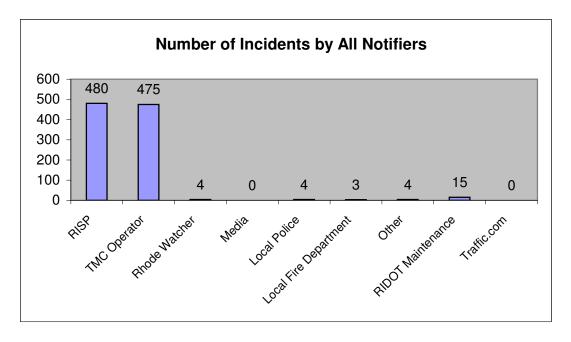
<sup>\*</sup>First notifier of the incident to TMC





Notifier	No. of Incidents
RISP	480
TMC Operator	475
Rhode Watcher	4
Media	0
Local Police	4
Local Fire Department	3
Other	4
RIDOT Maintenance	15
Traffic.com	0
Transcom	0

Note: Primary notifier indicates the first notifier of the incident to the TMC.
Additional notifiers are also logged, and are represented in the statistics for "all notifiers".



## 10. Incident Response

		Percent of Total
On-Scene Responding Agency	No. of Incidents	Incidents
State Police	775	87.27%
Tow	359	40.43%
Local Fire Department	212	23.87%
EMS	211	23.76%
Local Police	56	6.31%
Service Patrol	30	3.38%
Mass Highway	0	0.00%
DOT	12	1.35%
Hazmat	2	0.23%
DEM	0	0.00%
Connecticut DOT	0	0.00%
Construction	0	0.00%
Coast Guard	1	0.11%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	423
# of VMS Messages	88
# of DMS Messages	339
# of HAR Messages	219
# of Web Messages	798

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

